AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of determining the prognosis for a patient diagnosed with Alzheimer's disease (AD), neurofibromatosis, Huntington's disease, depression, amyotrophic lateral sclerosis, multiple sclerosis, ~~stroke,~~ Parkinson's disease, multiple infarcts dementia, a prion disease, a pathology of the developing nervous system, a pathology of the aging nervous system, an infection of the nervous system, a dietary deficiency, or a cardiovascular injury, said method comprising,

a) identifying a patient already diagnosed with said disease;

b) determining the *apoE* allele load of said patient by genotyping or phenotyping, said phenotyping including characterizing ApoE protein isoform, wherein the presence of at least one *apoE4* allele or at least one ApoE4 protein isoform is indicative of a poor patient outcome.

2. (Cancelled)

3. (Previously Presented) The method of claim 1, wherein said method further comprises obtaining a patient profile.

4. (Cancelled)

5. (Previously Presented) The method of claim 1, wherein said prion disease is Creutzfeldt-Jakob disease.

6. (Previously Presented) The method of claim 1, wherein said dietary deficiency is a congenital defect in amino acid metabolism.

7. (Original) The method of claim 6, wherein the defect is selected for the group consisting of arginosuccinic aciduria, cystathionuria, histidinaemia, homocystinuria, hyperammonaemia, phenylketonuria, and tyrosinanaemia.

8. (Previously Presented) The method of claim 1, wherein said patient is diagnosed with fragile X syndrome.

9. (Cancelled)

10. (Previously Presented) The method of claim 1, wherein said disease is Alzheimer's disease.

11. (Previously Presented) The method of claim 3, wherein said method further comprises a determination of said patient's sex.

12. (Previously Presented) The method of claim 3, wherein said method further comprises a determination of the genotype of said patient.

13. (Original) The method of claim 12, wherein said genotype is the presenilin genotype.

14. (Original) The method of claim 12, wherein said genotype is the apolipoprotein C1 genotype.

15-20 (Cancelled)